Supplementary Table 2. IL-15 and IL-15Rα in human solid cancers

Tumor type	IL-15 / IL15Rα alteration	Outcome	Beneficial effects	Reference
Head and Neck cancer	Increased serum levels of sIL-15. High intratumoral IL-15 concentrations.	Poor clinical outcome.		[37, 44]
Lung Cancer	High intratuoral IL-15 concentrations.	Poor clinical outcome.		[45]
Triple negative breast cancer	Cancer cells over express IL-15Rα and IL-15 production. No IL-15Rβ/γc complex (autocrine loops).	Increased cell proliferation, migration and protection from apoptosis.	Better survival outcome associated to paracrine activation of infiltrating mononuclear cells.	[49]
Prostate cancer	Intratumoral IL-15 overexpression.		Decreased cell proliferation and vessel formation. Recurrence free survival.	[55, 56]
Colon Cancer	IHC on human biopsies and tumoral implantation in nude mice reveals IL-15 production by metastatic cells. Genomic profile reveals intratumoral IL-15 loss in 30% of metastatic patients.	CRC implantation in nude mice reveals hyperplasia in adjacent mucosa neo angiogenesis and tumor progression.	Loss of IL-15 in 30% of metastatic patients correlates with low T-cells density and proliferation high risk of relapse and decreased survival.	[57, 58, 59]
Renal clear cell carcinoma (RCC)	In vitro and in vivo loss of IL-15Ryc Chain and JACK3. tmb-IL-15 expression on RCC cells. Renal cancer stem cell expression IL-15Rα/β/γc receptor.	rhIL-15 and tmb-IL-15 induce EMT and matrigel cell invasion.	In vitro rhIL-15 induces stable CSC differentiation into non-tumorigenic polarized epithelial cells.	[51, 52, 53, 54]
Melanoma	IL-15 production by primary cell cultures.	Juxtacrine IL-15 loops induce tumor escape mechanisms and inflammatory signals.		[7, 37, 44, 46, 47]